

CLAIMS

1. A rivet (1) comprising:

- a bearing head (2) in which an opening (8) is provided;
 - a pulling stem (3) adapted to cooperate in sliding relationship with the bearing head (2), through said opening (8);
 - 5 - an insertion body (4) connected to a first end of the pulling stem (3) and comprising, continuing on from the pulling stem (3), a notched portion (14);
- the bearing head (2) further comprising, on the inner faces of the opening (8), at least one tooth (10) adapted to cooperate with said notched portion (14);

said rivet being characterized in that the insertion body (4) comprises

- 10 - at least two longitudinal flat surfaces (13) interrupting said notched portion (14);
- at least two elastic feet (15) each comprising a first end elastically joined to the insertion body (4) and a second end which is free, each of these elastic feet (15) being adapted to adopt a folded position in which it is folded along
- 15 the insertion body (4), on one of said flat surfaces (13), and a tightened position in which it is arranged transversely of the general orientation of the insertion body (4);

and in that the bearing head (2) comprises at least one slot (9) enabling it to deform radially.

20 2. A rivet according to claim 1, characterized in that it is constituted by a single material.

3. A rivet according to claim 1 or 2, characterized in that each of the elastic feet (15) is additionally adapted to adopt a free position, between the folded position and the tightened position, the elastic foot (15) spontaneously

25 adopting this free position without being urged, in which its free end projects from the insertion body (4), the elastic foot (15) being orientated substantially at 45° with respect to the general orientation of the insertion body (4), its free end being closer to the pulling stem (3) than its joined end.

4. A rivet according to claim 3, characterized in that the insertion body

30 (4) further comprises at least one return foot (23), projecting from the insertion

body (4) towards one of the elastic feet (15), said return foot (23) being adapted to exert a force tending to push back the corresponding elastic foot (15) to its free position, when the latter is in its folded position.

5 5. A rivet according to one of claims 1 to 4, characterized in that the pulling stem (3) comprises at least two longitudinal flat surfaces (11) joined together by other surfaces, each of these flat surfaces (11) being positioned to continue on from one of said flat surfaces (13) of the insertion body (4), and in that said opening (8) provided in the bearing head (2) comprises longitudinal flat surfaces, of the same profile as the flat surfaces (11) of the pulling stem (3),
10 adapted to cooperate with said flat surfaces (11) of the pulling stem (3) to prevent the bearing head (2) from rotating with respect to the pulling stem (3).

 6. A rivet according to claim 5, characterized in that the flat surfaces of the opening (8) provided in the bearing head (2), and said slot (9) in the bearing head (2) are angularly offset.

15 7. A rivet according to one of claims 1 to 6, characterized in that the bearing head (2) comprises a collar (5) having a bearing surface (6) substantially perpendicular to the pulling stem (3), as well as an annulus (7) projecting substantially perpendicular to said bearing surface (6), said opening (8) passing completely through the collar (5) and being coaxial with the annulus (7).

20 8. A rivet according to claim 7, characterized in that said slot (9) and said tooth (10) of the bearing head (2) are provided on said annulus (7).

 9. A rivet according to one of claims 1 to 8, characterized in that the insertion body (4) comprises at least one stop surface (21) arranged transversally to the general orientation of the insertion body (4) and adapted to
25 form an abutment for the elastic feet (15) when they are in the tightened position.

 10. A rivet according to claim 9, characterized in that the insertion body (4) further comprises at least one blocking surface (22) provided transversally to the general orientation of the insertion body (4), facing said stop surface (21) and spaced from it by a distance substantially equal to the thickness of said elastic
30 feet (15), said blocking surface (22) being adapted to form a counter abutment for the elastic feet (15) when they are in the tightened position.

11. A rivet according to one of claims 1 to 10, characterized in that the connection of the pulling stem (3) and the insertion body (4) is made by a weakened zone (12) which is narrower than the pulling stem (3).

5 12. A rivet according to one of claims 1 to 11, characterized in that the insertion body (4) further comprises, at its end opposite the pulling stem (3), an insertion head (16) flaring out from a small end (20) to a large end (19), the small end (20) being furthest from the pulling stem (3) and the large end (19) being adapted such that the elastic feet (15), when they are in the folded position, are totally retracted with respect to the outline of the large end (19).